

AUTHOR: Dubrovskiy, O.V., Candidate of Technical Sciences 114-6-3/11
 TITLE: The aerodynamics of isothermal air flow in double turbulator combustion chambers of gas turbines. (Aerodinamika izotermicheskogo vozdušnogo potoka b dvukh registrovykh kamerakh sgoraniya gazoturbinnnykh ustanovok.)
 PERIODICAL: "Energomashinostroenie" (Power Generation Machinery Construction) 1957, Vol.3, No.6, pp. 8 - 12 (U.S.S.R.)
 ABSTRACT: In gas turbines a central bladed turbulator is often installed in the combustion chamber to rotate the primary air delivered to the chamber. When burning liquid fuel it is sometimes difficult to secure sufficient turbulence. Therefore, L.A. Kuznetsov (Candidate of Technical Sciences) and the author proposed a design of cylindrical combustion chamber with two concentric turbulators to whirl the primary air. The direction of rotation of the air leaving the inner turbulator is the opposite of that leaving the outer one. The outlet of the outer turbulator is somewhat forward of the outlet from the inner one. With a combustion chamber of this type better results were obtained than when a single turbulator was used. The thermal efficiency of the chamber was 97.4% and in some cases 98.5%. The combustion conditions were improved, no soot or coke were deposited on the inner surfaces of the chamber. It was, therefore,

Card 1/4

The aerodynamics of isothermal air flow in double turbulator combustion chambers of gas turbines. (Cont.)

114-6-11

decided to make a detailed study of the main processes in a chamber with two concentric turbulators. It was considered necessary to make a qualitative study of the motion of the gas-air flow in chambers of this type. It was also necessary to consider the influence of chamber design on the structure of the flow and on the hydro-dynamic resistance and to determine the quantitative distribution of air in the different ducts and to evaluate the intensity of mixing. The problem was solved for isothermal air flow.

The design of the experimental combustion chambers and the operating conditions in them were based on the theory of approximate modelling. In modelling combustion of gaseous and heavy liquid fuel, mixing plays a very important part and, therefore, the models and specimens were made with strict geometric and hydro-dynamic similarity. A number of tests were made on actual combustion chambers.

For isothermal flow tests a large centrifugal blower was used. Two types of combustion chamber were investigated; with separation of the primary and secondary air by a heat-resistant tube and with aerodynamic separation, of primary

Card 2/4

The aerodynamics of isothermal air flow in double turbulator combustion chambers of gas turbines. (Cont.)

114-6-3/11

and secondary air. Both types are illustrated by diagrams. Tests were made on a model 360 mm diameter and an actual chamber 450 mm diameter.

The results of the investigations into the structure of air flow are presented in the form of graphs for both types of combustion chamber. It is found that the use of opposite directions of rotation in the inner and outer turbulators is a very important factor in intensifying the mixing processes.

Circulation, which helps to maintain flame stability, is more intensive in a chamber with double turbulators and takes place over a shorter distance.

The air distribution in the combustion chamber was studied and, since losses in the turbulator constitute the main losses of head in the primary air duct, determinations were made of the isothermal resistance coefficient of bladed turbulators of various blade designs. The results are given in the form of a graph. Turbulators with straight blades give a higher loss of head than those with a smooth blade channel shape. A graph is given of the hydraulic resistance of actual combustion chambers 900 mm in diameter tested on the same gas turbine installation. The results

Card 3/4

The aerodynamics of isothermal air flow in double turbulator combustion chambers of gas turbines. (Cont.)
114-6-3/11
show that the hydraulic resistance of the double turbulator chamber is somewhat higher than that of the single turbulator chamber of the Central Boiler and Turbine Institute.
(TsKTI)

It is concluded that chambers with two concentric turbulators have a number of advantages compared with those with single turbulators. Since the primary air supply is divided between the small and large turbulators the distribution of air in the combustion space is improved. The reduction in the height of blades in the double turbulator chamber compared with a single turbulator chamber of the same output causes accelerated mixing of fuel and air. The double turbulator chamber creates greater gradients of velocity components on the radius and length of the chamber which has a favourable influence on the processes of mixing. Increase in the angles of whirl in primary air turbulators increases the intensity of return currents, reduces the length of the circulation zone, intensifies the processes of mixing, but it is associated with increased pressure losses in the chamber.

There are 8 figures and 3 Slavic references.

Card 4/4
AVAILABLE:

SOV/96-59-6-10/22

AUTHOR: Dubrovskiy, O.V. (Candidate of Technical Sciences)
TITLE: An Experimental Investigation of Pulsating Combustion of
Liquid Fuel in the Combustion Chambers of Stationary
Gas-Turbine Installations (Eksperimental'noye
issledovaniye pul'satsionnogo goreniya zhidkogo topliva
v kamerakh sgoraniya statsionarnykh gazoturbinnnykh
ustanovok)

PERIODICAL: Teploenergetika, 1959, Nr 6, pp 56-61 (USSR)

ABSTRACT: In operating gas-turbines it was found that the power
oscillated at a frequency of between 1.5 and 3 c/s. In
some cases the amplitude of the oscillations was 15% of
the rated output of the machine. It was later found that
there are pulsations of temperature and pressure in the
gas leaving the combustion chamber. A further disadvan-
tage of these oscillations is that they cause vibration
of the equipment. It was accordingly decided to study
pulsating combustion in a combustion chamber with a two-
row swirler for primary air and a further swirler for
the secondary cooling air; a sketch of the chamber is
given in Fig 1. A special feature of this construction
is that the swirlers are coaxial, and are made with flat
blades. The test rig consisted of two blowers, an air

Card 1/6

SOV/96-59-6-10/22

An Experimental Investigation of Pulsating Combustion of Liquid Fuel in the Combustion Chambers of Stationary Gas-Turbine Installations

heater, the test combustion chamber and an auxiliary one, fuel supply systems and the associated pipeworks. The instrumentation is described at some length. During the investigations studies were made of the influence on combustion pulsation of a number of conditions over quite a wide range. For example, the excess-air factor ranged from 5.0 to 21.0, the excess primary-air factor from 1.32 to 6.75, the inlet air temperature from 27 to 322 °C and the thermal loading of the combustion chamber from 3.0×10^6 to 8.75×10^6 kcal/m³hr atm. A study was also made of the influence of the type of fuel and the construction of the atomiser. Oscillations were observed in the temperature and pressure of the gas flow leaving the chamber and also fluctuations in the brightness of the flame. As will be seen from the oscillograms in Fig 3, the oscillations have a clearly defined frequency, are undamped and are of fairly constant amplitude. There are two types of process of different frequency characteristics, having the ranges 1.5 to 3 c/s and

Card 2/6

SOV/96-59-6-10/22

An Experimental Investigation of Pulsating Combustion of Liquid Fuel in the Combustion Chambers of Stationary Gas-Turbine Installations

10 to 60 c/s. The low-frequency pulsations did not depend upon the thermal loading of the combustion chamber, as will be seen from Fig 4. Neither did these oscillations depend on any other of the factors studied except the excess primary-air factor, the influence of which will be seen from the graphs given in Fig 5. The frequency of the higher-frequency pulsation does not depend on thermal loading or on the inlet air temperature. The frequency level was found to be proportional to the primary air consumption, as will be seen from the graph in Fig 6. These results are discussed and it is concluded that the medium-frequency oscillations are caused by vibrating combustion of fuel/air mixture, which is unevenly distributed in the combustion space. The low-frequency oscillations must have a different cause, for they are the same both when using centrifugal nozzles and a high-head fuel system and when using ejection nozzles and a low-head fuel system, as will be seen from the results given in Fig 8. Flame pulsation has been

Card 3/6

SOV/96-59-6-10/22

An Experimental Investigation of Pulsating Combustion of Liquid
Fuel in the Combustion Chambers of Stationary Gas-Turbine
Installations

known to occur in combustion chambers with swirlers because of accumulations of fuel vapour in the circulation zone. These vapours burn slowly because of lack of oxygen. Periodic pressure increases cause regular interruptions of circulation so that the vapours are forced to the mixer when they are burned. In order to see whether this hypothesis applies in the present case, nozzles of different length were used, so that the point of the fuel injection was located approximately in the middle and end of the reversed-flow zone. With the long nozzle the frequency was reduced from 2.5 to 1.6 c/s and there was intense deposit formation on the relatively cold surface of the fuel delivery tube, so that the efficiency of the chamber was reduced. In the full-scale combustion chamber the fuel was gas-oil atomized by five centrifugal nozzles. Tests made to verify the influence of the scale factor on pulsating combustion confirmed that only the excess-air factor had any influence on the frequency of the oscillations. Evidently the low-

Card 4/6

SOV/96-59-6-10/22

An Experimental Investigation of Pulsating Combustion of Liquid Fuel in the Combustion Chambers of Stationary Gas-Turbine Installations

frequency oscillations are most important and the higher-frequency oscillations do not matter so much. It was difficult to measure the amplitude of the oscillations, but the graph given in Fig 9 for the relative amplitude of the low-frequency oscillations shows that temperature variations are mostly small, not exceeding 4%; however, with an excess primary-air factor of 2.5 the relative amplitude may be up to 20%, or 110 °C under the particular conditions. In the full-scale combustion chamber the greatest relative amplitude was observed with an excess primary-air factor of 4.4, and was 10.5%. This shows that under some conditions there can be a sharp increase in the amplitude of the pulsations which is of a resonant nature. Low-frequency oscillations of these dangerous proportions correspond to the excess primary-air

Card 5/6

SOV/96-59-6-10/22

An Experimental Investigation of Pulsating Combustion of Liquid
Fuel in the Combustion Chambers of Stationary Gas-Turbine
Installations

factors that occur during the operation of gas-turbine
combustion chambers burning liquid fuel.
There are 9 figures and 6 references, of which 5 are
Soviet and 1 English.

ASSOCIATION: Nevskiy mashinostroitel'nyy zavod
(Neva Machine-building Plant)

Card 6/6

Dubrovskiy, O.V.

2/034/60/0004/03/0026/026
E194/E155

ABSTRACT: None given

TITLE: The 131st All-Union Scientific Technical Session on Geo-Petroleum Petroscience

ABSTRACT: The 15th All-Union Scientific Technical Session on Estimation and Control of Systems

the fifth and sixth meetings were held in Moscow on the 21st and 22nd of July. They were presided over by the Qu-Tsin Commission of the Standing Committee of the C.P.R., together with the State Scientific Technical Commission of the Council of Ministers of the USSR. Reports were read about the testing and operation of gas of a 30 MW generating from 100 to 12500 kv and the design of 600 representative of power plants, attended by 1000 representatives of power plants, design institutes, technical colleges, Councils of National Economy and other institutions. The following reports were read: "Research results achieved in the development of small steam-turbine boilers for the Khosrovovskiy factory."

U/0000/60/000/03/026/028
U196/2099

**The 15th All-Union Scientific Session on Gas-Turbine
Manufacture**

[illegible]

8/286/60/000/03/026/028
8194/2655

22-10000
The 13th All-Union Scientific Technical Session on Gas-Turbine
Motordesigns

Research Institute, Leonid A. M. Etylov, "Investigation of Laser-Induced Plasma in an Oxygen-Carbon Dioxide Gas Mixture," *Journal of the Soviet Union of Engineers*, No. 1, 1965, p. 10. The scientific research and experimental work for the period 1960 to 1965.

Case 3/3

23952

S/096/61/000/008/003/005
E194/E155

11.7300

AUTHOR: Dubrovskiy, O.V., Candidate of Technical Sciences
TITLE: An Investigation of low-frequency pulsations in gas turbine combustion chambers

PERIODICAL: Teploenergetika, 1961, No.8, pp. 32-37

TEXT: The discharge from gas-turbine combustion chambers is subject to pulsations of temperature and pressure which may be of two types; low frequency in the range 1.5 to 6.0 c/s, and medium frequency in the range 12 to 60 c/s. The low-frequency pulsations may reach 15-20% of the mean values of temperature and pressure and cause variations in turbine output and other undesirable effects. The medium-frequency pressure and temperature variations on the other hand may have some beneficial effect, and in any case they cannot be completely prevented. The main object of the present work was to study the cause of low-frequency pulsations of the flame in combustion chambers, studying the distribution of pulsating temperatures and pressures both in the combustion zone and beyond the chamber. The instrumentation is described, including a special inductive differential pressure

Card 1/5

23952

S/096/61/000/008/003/005
E194/E155

An investigation of low-frequency pulsations in gas turbine combustion chambers

pick-up. The tests were made on a combustion chamber with a two-row swirler for the primary air and a swirler for the secondary cooling air. It has been described in an article by the present author (Ref.5: Energomashinostroyeniye, No.6, 1957). The chamber can burn both liquid and gaseous fuel. Tests were made both on models and on full-size combustion chambers. The former had an internal diameter of 445 mm, and the latter an internal diameter of 1400 mm. Variants of the model differed only in the angle of installation of the blades and the swirlers. Temperature and pressure fluctuations were recorded at several points on the radius of the cross-section of the chamber. In interpreting the oscillograms only the fundamental low-frequency pulsations were taken into account. The tests showed that temperature and pressure pulsations occurred under all operating conditions of combustion chambers of various designs both within the combustion space and beyond it. These pulsations are usually insignificant and only become large or even dangerous under special conditions. As the

Card 2/ 5

23952
S/096/61/000/008/003/005
E194/E155

An investigation of low-frequency pulsations in gas turbine combustion chambers

pulsations are not harmonic functions and resemble turbulent pulsations, statistical methods of investigation must be employed. However, the pulsations are stable and undamped. Analysis of the frequency distribution within the volume and at individual sections showed that despite great variation in conditions and chamber design features, the pulsation frequency was of a very narrow range, being 2 - 4 c/s for the full-scale chamber and 2.5 - 5 c/s for the model. In the section immediately beyond the combustion chamber head the amplitude of the pulsations could be up to 50% and there was a definite relationship between the variations of pressure and of temperature. In analysing probable causes of low-frequency pulsations it is considered that the processes of heating, evaporation and combustion of fuel particles are very complicated; the rates of the individual stages are not the same and so individual portions of fuel may be at different stages of conversion into combustion products. Accordingly, the nascent pulsations in the combustion zone have a delay time which

Card 3/5

X

23952
S/096/61/000/008/003/005
E194/E155

An investigation of low-frequency pulsations in gas turbine combustion chambers

is in some way bound up with the aerodynamics of the system. It is considered that the low-frequency oscillations are not due to external influences but are generated in the combustion space of the chamber by interaction between combustion effects and flow aerodynamics. They are not forced oscillations and their stability and constancy of frequency and amplitude show that the type of oscillation is fully determined by the properties of the oscillatory system itself. The source of energy of the oscillations is the zone of turbulent exchange which is continually supplied with heat of combustion. Feedback is provided by the hot combustion products which are drawn into this turbulent zone and initiate the combustion process. The greatest pulsations are observed on a surface which approximately coincides with the boundary of reverse flow. The fact that pulsation effects are particularly great under certain conditions of excess primary air is to be explained by the development of pulsations in the ratio between the delivery of energy to the turbulent exchange zone and its removal. Thus the pulsations result on the one hand from

Card 4/5

S/096/61/000²¹⁸⁵²/003/005
E194/E155

An investigation of low-frequency pulsations in gas turbine combustion chambers

variations in the physical-chemical process of fuel combustion and on the other in flow aerodynamics which control the evolution of heat. It follows that low-frequency oscillations cannot be completely prevented but they may be weakened by disturbing the energy balance in the zone of turbulent heat exchange. This can be achieved by using a number of small combustion chambers instead of one large one.

There are 6 figures and 7 references: 6 Soviet and 1 German.

ASSOCIATION: Nevskiy mashinostroitel'nyy zavod
(Neva Engineering Works)

Card 5/5

EXPERIMENTAL DATA

EXPERIMENTAL DATA

EXPERIMENTAL DATA

EXPERIMENTAL DATA

EXPERIMENTAL DATA

EXPERIMENTAL DATA

EXPERIMENTAL DATA

1. The first step in the process of determining the temperature of a body is to measure the temperature of the body at a point where the temperature is uniform. This is usually done by using a thermometer or a thermocouple. The temperature of the body is then compared to the temperature of the surrounding medium. If the temperature of the body is higher than the temperature of the surrounding medium, the body is said to be at a higher temperature than the surrounding medium. If the temperature of the body is lower than the temperature of the surrounding medium, the body is said to be at a lower temperature than the surrounding medium. If the temperature of the body is the same as the temperature of the surrounding medium, the body is said to be at the same temperature as the surrounding medium.

DUBROVSKIY, O.V., kand. tekhn. nauk; KUZNETSOV, L.A., kand. tekhn.
nauk; NAREZHNIY, E.G., kand. tekhn. nauk

Experimental study of a model of a three-register combustion
chamber of a gas turbine system operating on liquid fuel.
Teploenergetika 10 no.7:31-36 J1 '63. (MIRA 16:7)

1. Nevskiy mashinostroitel'nyy zavod i Leningradskiy korablestroitel'nyy institut.

(Gas turbines)

BEYER, A. Ya.; DUBROVSKIY, P.A.

Some results of the operation of UDAR-3 radioactive level
gauges. Transp. i khran. nefti i nefteprod. no. 4129-33*64
(MIRA 17:7)

1. Odesskaya perevalochnaya neftebaza.

DUBROVSKIY, R.L., ordinator

Vascular permeability in portal hypertension before and after surgery. Kas.med.shur. no.4:31-33 J1-Ag '62. (MIRA 15:8)

1. Kafedra fakul'tetskoy khirurgii lechebnogo fakul'teta (sav. - doktor med.nauk M.P.Postolov) Tashkenskogo meditsinskogo instituta.
(PORTAL HYPERTENSION) (CAPILLARIES—PERMEABILITY)

DUBROVSKIY, S.A., insh.; LESHCHENYUK, S.L.; KISSEL', A.B.

Using an additional hitched apparatus. Stroi. truboprov.
6 no.4:20-21 Ap '61. (MIRA 14:6)

1. Spetsupravleniye No.4 tresta TSentrospeksstroy, g.Yaroslavl'.
(Excavating machinery)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

DUBROVSKIY, S.K.

~~Полное наименование объекта исследования~~

Gigantic cuckoopint. Priroda 45 no.2:116 P '56.

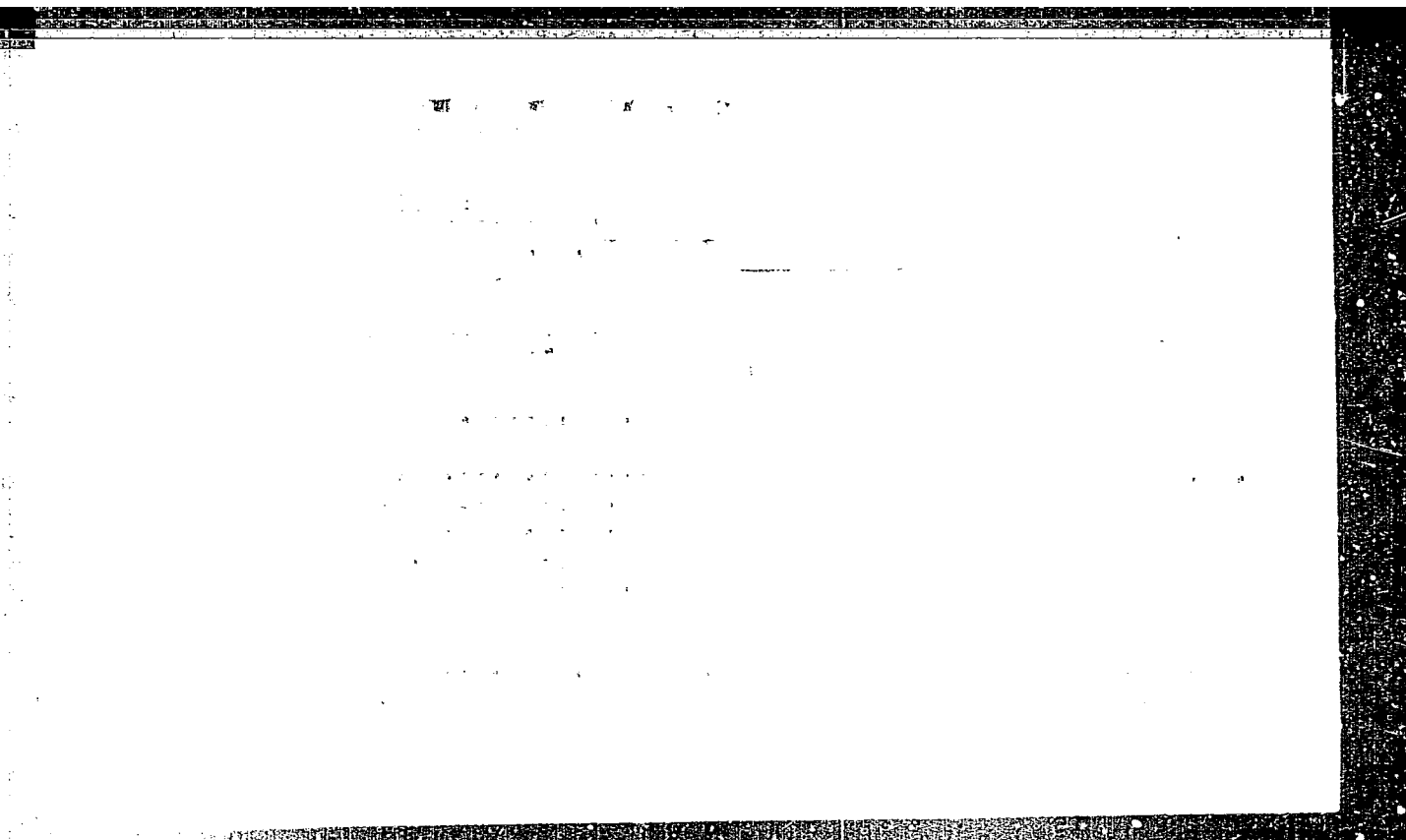
(MLBA 9:5)

1. Ulan-Ude, Buryat-Mongol'skaya ASSR.

(Cuckoopint)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

APPROVED FOR RELEASE: 08/25/2000

U

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

POSPELOV, P.N., akademik; SMIRNOV, V.S.; LAVRENT'YEV, M.A., akademik;
GAFUROV, B.G.; KEDROV, B.M.; DUBROVSKIY, S.M., doktor istor.nauk;
KONSTANTINOV, F.V.

Discussion of the report. Vest. AN SSSR 33 no.8:29-39 Ag '62.
(MIRA 16:8)

1. Chleny-korrespondenty AN SSSR (for Smirnov, Gafurov, Kedrov,
Konstantinov).

(No subject heading)

KOLESNICHENKO, Vladimir Fedorovich; DUBROVSKIY, Samuil Moiseyevich; YERO-
KHIN, G.M., red.izd-va; POLESIN, Ya.L., otv. red.; BOLDYREVA, Z.A.,
tekhn. red.

[Labor safety in stoping] Bezopasnost' truda pri vedenii ochistnykh
rabot. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu,
1961. 100 p. (MIRA 14:11)

(Stoping (Mining)—Safety measures)

KOLESNICHENKO, Vladimir Fedorovich; DUBROVSKIY, Samuil Moiseyevich;
POLESIN, Ya.L., otv. red.; GIL'MAN, S.E., red. izd-va;
LOMILINA, L.N., tekhn. red.; SHKLYAR, S.Ya., tekhn. red.

[Labor safety in carrying out mine development operations]
Bezopasnost' truda pri provedenii gornopodgotovitel'nykh
vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gor-
nomu delu, 1961. 72 p. (MIRA 15:2)
(Mining engineering—Safety measures)

GALUZO, Petr Grigor'yevich; DUBROVSKIY, S.M., doktor istor.nauk,
prof., red.; PAL'GOVA, Z.N., red.

[Agrarian relations in southern Kazakhstan in 1867-1914]
Agrarnye otnosheniia na IUGE Kazakhstana v 1867-1914 gg.
Alma-Ata, Nauka, 1965. 344 p. (MIRA 18:4)

Дубровский, С. К.

The Bratskojarsk Inst. of Epid. and Meroli., (-1946-).

"The Colorimetric Express Method for the Determination of Active Chlorine in Drinking Water,"

Zhur. Analit. Khim., No. 5-6, 1946. .

DUBROVSKY, S.M.

Chemical Abstracts

Vol. 48 No. 5

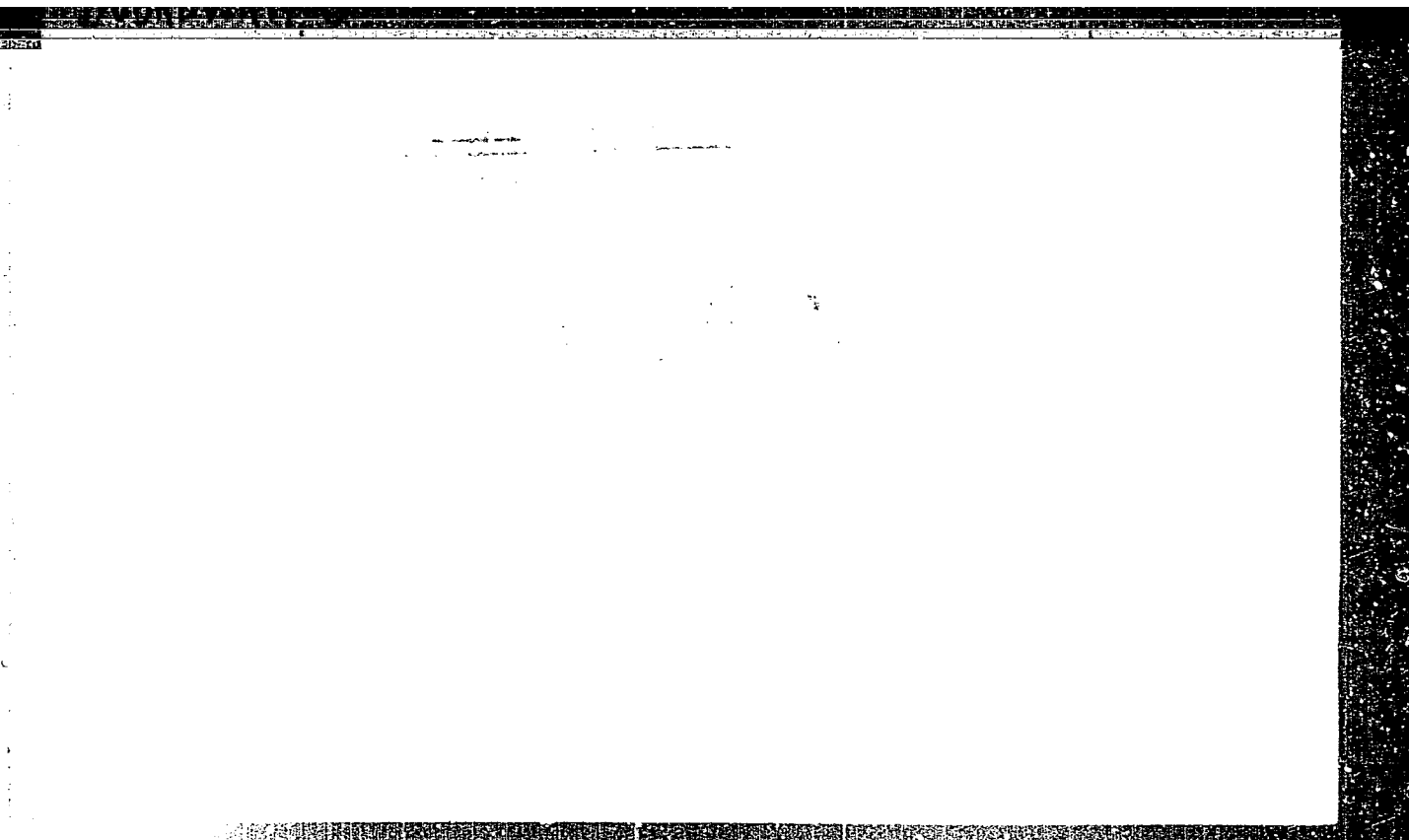
Mar. 10, 1954

General and Physical Chemistry

Specific gravity and viscosity of the formamide-ethyl formamide system. B. N. Yagulya and S. M. Dubrovskiy (Pribl. k. Khim. i. Agr. Inst., Leningrad). *Zhur. Fiz. Khim.* 27, 231-4 (1953); cf. *C.A.* 47, 6112a (1957).—The viscosity and sp. gr. of mists. of HCONH_2 (I) and HCONEt_2 (II) in 14 different concns. between 0 and 100 mole % of HCONH_2 , were detd. by means of pycnometers and a closed-capillary viscometer at the temps. 0, 25, 50, and 75° in a thermostat whose temp. was const. within 0.02°. The tabulated results indicate much assocn. of mols.; it is suggested that I and II are combined in various ways through H bonds.
J. W. Lowenberg, Jr.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

DUBROVSKIY, S. M.

DUBROVSKIY, S. M. -- "Certain Methods of Physicochemical Analysis of Binary Liquid Systems Containing Diethyl Formamide." Min Higher Education. L'vov Agricultural Inst, Chair of Chemistry. L'vov, 1955. (Dissertation for the Degree of Candidate of Chemical Sciences.)

SO: Knizhnaya letopiis', No. 4, Moscow, 1956

DUBROVSKIY, S.M.

AUTHOR: Dubrovskiy, S.M.

76-12-2/27

TITLE: On the Construction of Non-Singular Diagrams of Composition Properties
(K voprosu o postroyenii nelineynykh diagramm sostav-svoystvo)

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1957, Vol. 31, Nr 12, pp. 2613-2618 (USSR)

ABSTRACT: The subject of the present treatise was to prove the selection of the method for expressing the composition at the construction of non-singular diagrams of composition-properties. V.Ia.Anosov [Ref.1] showed that, if the respective property is a linear function of the composition expressed by parts of weight, and if at the construction of the diagram the molar parts are plotted on the abscissa, the curve converts from a straight line to a hyperbola. With the physical-chemical analysis also parts by volume are applied for the representation of the composition. Therefore, 6 transitions of the one expression for the composition to the other are possible. It is shown here that the theoretical and experimental reasons for the diagram construction method (diagram of composition property) consists in the necessity of selecting such a characteristic expression for the respective property that, with this expression, the respective property in the case of the most simple solution is a linear function of the composition. Due to the analysis of the change of the appearance of the isotherms at the transition of one ex-

Card 1/3

On the Construction of Non-Singular Diagrams of Composition Properties

76-12-2/27

pression of the composition to the other it is proved that the bent property curves can be obtained not only with the irrational systems, but also with the most simple solutions in the case of random selection of the expression for the composition. It is pointed out that in the case of random expression of the composition at the construction of the diagrams of composition-property in the determination of the relation between the composition and the properties of binary liquid systems errors may occur. It is shown that from the strictly methodical point of view in the case of rational systems it is clearer to construct the diagrams of composition property in such a way that the molar parts are plotted on the abscissa. With this method of construction of diagrams the composition of the developing compound is seen and the singular point remains preserved with all possible transitions. It is further shown that the isotherms for the heat of mixture should be constructed in such a way that the mol parts are plotted on the abscissa. It is pointed out that with the construction of the diagrams for composition - deviation from the additivity, independently of the expression for the composition at the construction of the diagram of composition property, the diagram should be drawn in such a way that the mol parts

Card 2/3

On the Construction of Non-Singular Diagrams of Composition
Properties

76-12-2/27

are plotted on the abscissa. In this case no conversion of the
straight line into a hyperbola takes place. There are 3 figures,
1 table, and 14 references, 10 of which are Slavic.

ASSOCIATION: L'vov Institute of Agriculture (L'vovskiy sel'skokhozy-
aystvennyy institut)

SUBMITTED: June 15, 1956

AVAILABLE: Library of Congress

Card 3/3

DUBROVSKIY, S.M.

Change of the surface shape of diagrams representing ternary single-phase systems when passing from one mode to another mode of expression in terms of mole fractions and molecular ratios. Zhur.neorg.-khim. 6 no.12:2781-2796 D '61. (MIRA 14:12)

1. L'vovskiy sel'skokhozyaystvennyy institut.
(Systems (Chemistry))

DUBROVSKIY, S.M., doktor ist. nauk, prof., otv. red.; SIDOROV, A.L.,
doktor ist. nauk, prof., red.; SHATSILLO, K.F., kand. ist.
nauk, red.; BESTUZHEV, I.V., red. izd-va; GOLUB', S.P., tekhn.
red.

[Characteristics of the agrarian system in Russia in the period
of imperialism; materials] Osobennosti agrarnogo stroia Rossii v
period imperiializma; materialy. Moskva, Izd-vo Akad. nauk
SSSE, 1962. 351 p. (MIRA 15:9)

1. Sessiya Nauchnogo soveta po probleme "Istoricheskiye predpo-
syelki Velikoy Oktyabr'skoy sotsialisticheskoy revolyutsii," Mos-
cow, 1960. 2. Institut istorii Akademii nauk SSSR, Moskva (for
Dubrovskiy, Sidorov).

(Land tenure)

DUBROVSKIY, S.M.

Relation between curves of the same property of a binary system expressed in molar volume concentration and weight, volume and molar fractions. *Zhur.fiz.khim.* 36 no.5:962-968 My '62. (MIRA 15:8)

1. L'vovskiy sel'skokhozyaystvennyy institut.
(Systems (Chemistry))

DUBROVSKIY, S.M., AMOSOV, V.Ya.

Relation between curves of the same property in a binary system. Zhur.
msorg.khim. 8 no.3:746-750 Mr '63. (MIRA 16:4)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova
AN SSSR i L'vovskiy sel'skokhozyaystvennyy institut.
(Systems (Chemistry))

DUBROVSKIY, S.M.

Change in the shape of property curves of binary systems on passing
from relative to fraction terms for expressing a composition. Zhur.
fiz.khim. 37 no.1:30-35 Ja '63. (MIRA 17:3)

1. L'vovskiy sel'skokhozyaystvennyy institut.

DUBROVSKIY, S.M.

Correlation between lines in the sectional planes of ternary
system diagrams in the expression of the composition by
various fraction terms. Zhur. neorg. khim. 9 no.5:1250-
1265 My '64. (MIRA 17:9)

S/079/62/032/006/003/006
D202/D304

AUTHORS: Shpital'nyy, A. S. and Dubrovskiy Sh.

TITLE: The process of formation of polyamide resins

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 6, 1962, 1984-1986

TEXT: In previous investigations the authors obtained resins from fatty acids and caprolactam but because of the high temperature needed for the resin formation they were unable to isolate intermediate reaction products. In this study acetyl chloride was used instead of the acid; the reaction took place at room temperature and proceeded without lactam ring fission. N-acetylcaprolactam was formed and isolated. On heating, this lactam polymerized to give a polyamide with the elimination of some acetyl chloride. The authors conclude that the structure of the polyamide needs further investigation.

SUBMITTED: June 10, 1961

Card 1/1

DUBROVSKIY, Serafim Sergeyevich; SHEL'VANYUK, Mikhail Igorevich;
ZHERBENKOV, I.V., red.; ABRAMOVA, Ye.A., tekhn.red.

[Manual for workers in mechanized mines] V pomoshch'
prokholchiku mekhanizirovannogo rabota. Rostov, Rostovskoe
knizhnoe izd-vo, 1959. 91 p. (MIRA 14:2)
(Coal mines and mining)

DUBROVSKIY, V.
DOUBROVSKI, V.

PA 8127

USSR/Mathematics

Feb 1947

Mathematical functions

"On Some Properties of Completely Additive Set
Functions and Their Application to Generalization
of a Theorem of Lebesgue," V. Dubrovsky, 12 pp

"Matemat1 Sbor" Vol XX, No 2

Study of U , an abstract set, and M , a family of
subsets of U , where the family M contains all
differences and all finite or enumerable sums
of its elements, as well as U itself and the
void set.

8127

DUBOVSKIY, VLADIMIR

"On the Channels of Sevastopol", Krymizdat 1955.

DUBROVSKIY, V., inzh.; STYBLIK, V.

A simple regenerative receiver. Radio no.9:27-28 S '62.
(MIRA 15:9)
(Radio--Receivers and reception)

PEKARSKIY, S., inzh.; DUBROVSKIY, V., red.

Societies should be organized in all enterprises. WTO no.4:
46-47 Ap '59. (MIRA 12:6)

1. Redaktor anogotirashnoy gazety "Tekstil'shchik," g.Serpukhovo,
Moskovskoy oblasti (for Dubrovskiy).
(Research, Industrial)

DUBROVSKIY, V.

District party committee and the scientific technical community.
HFO 2 no.6:52-54 Je '60. (MIRA 14:2)

1. Sekretar' Stalinskogo raykoma Kommunisticheskoy Partii Sovetskogo
Soyuza g.Taganroga.
(Taganrog—Machinery industry)

SMIRNOV, Boris Vasil'yevich; ~~MURQVSKIY~~, V.A., nauchnyy red.;
MEL'NIKOVA, G.P., red.; PERSON, M.N., tekhn. red.

[Handbook for beginning electricians on rural wire broadcast-
ing and communications] Spravochnik molodogo elektromekhanika
po sel'skoi svyazi i radiofikatsii. Moskva, Vses.uchebno-
pedagog. izd-vo Proftekhizdat, 1961. 431 p. (MIRA 15:2)
(Electric engineering—Handbooks, manuals, etc.) (Radio)

SMIRNOV, Boris Vasil'yevich, doktor tekhn. nauk; DUBROVSKIY, V.A.,
red.; PEVZNER, V.I., tekhn. red.; FEDOTOVA, A.F., tekhn. red.

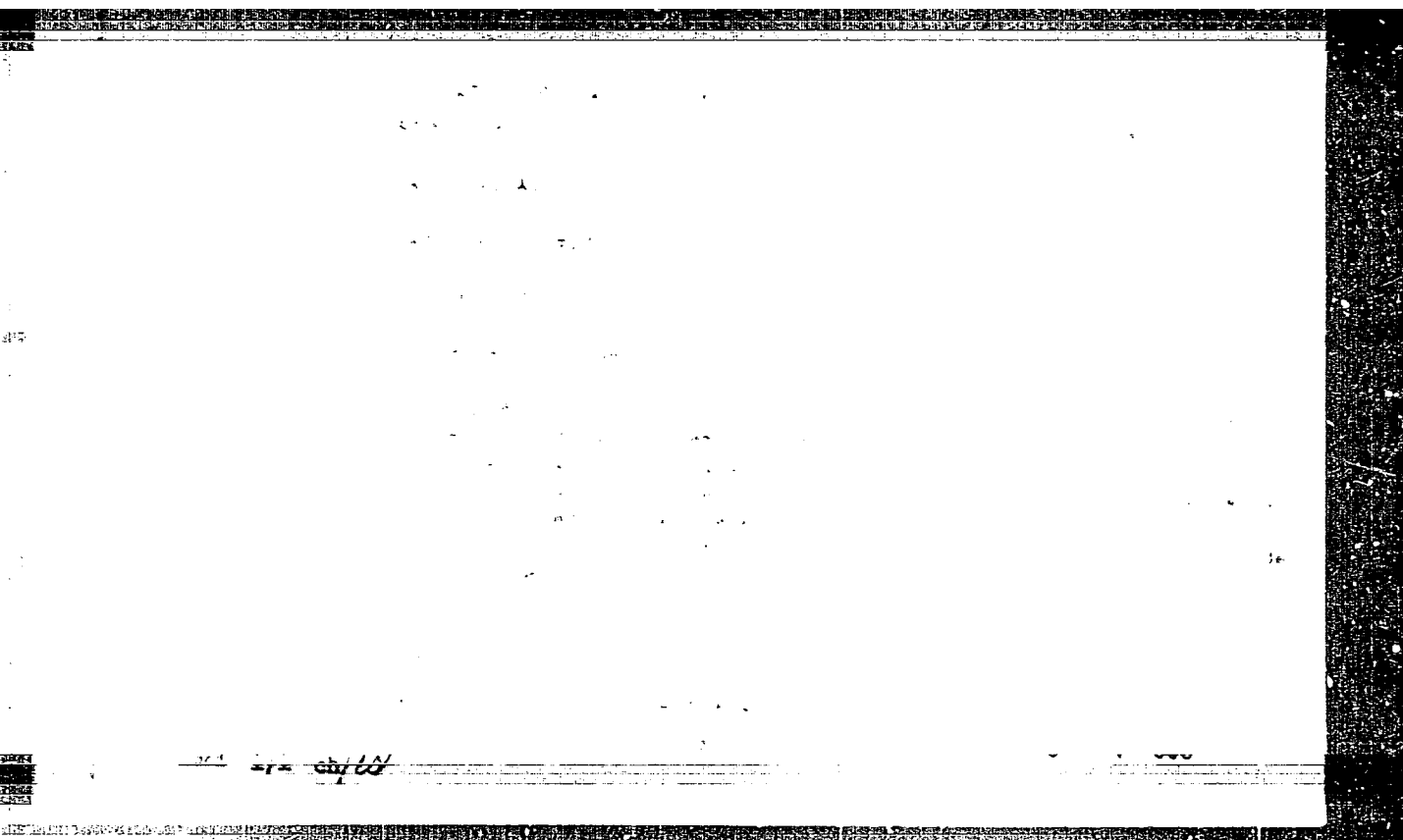
[Principles of electronics and telecommunication engineering]
Osnovy elektroniki i tekhniki svyazi. Moskva, Sel'khozizdat,
1962. 406 p. (MIRA 16:3)
(Electronics) (Telecommunication)

KIRIN, A.A., insh.; DUBROVSKIY, V.A., insh.

Shape of the cross section of a bulb bar. Sudostroenie 29
no.3153 Nr '63'. (MIRA 16:4)
(Shipbuilding materials)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

AKHREM, A.A.; KAMENITSKIY, A.V.; DUBROVSKIY, V.A.

Thermal isomerisation in the 16 α , 17 α -dihydroxy 20-keto
steroid series. Izv. AN SSSR. Ser. khim. no.12:2237-2238
D '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN SSSR im. Zelinskogo.

DEROVSKIY, V.A.; AKHREM, A.A.; KAMERNITSKIY, A.V.

Transformed steroids. Report No.4: Synthesis, properties and transformations of 3β , 16α , 17α -trihydroxy- Δ^5 -pregnen-20-one. Izv.AN SSSR. Ser.khim. no.1:103-111 Ja '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

AKHREM, Afanasiy Alekseyevich; DUBROVSKIY, V. A.; KAMERNITSKIY, A. V.

"Thermal isomerisation in the series of 16 α ,17 α -dihydroxy-20-keto steroids."

Report presented for the 3rd Intl. Symposium on the Chemistry of
Natural Products (IUPAC), Kyoto, Japan, 12-18 April 1964.

DUBROVSKIY, V.A., insh.

Efficient system of brake shoe suspension. Trudy MIIT no.150:
136-149 '62. (MIRA 16:2)

(Railroads--Brakes)

1-449110

problem) for these equations is solved. The connection between
 perturbed and the perturbation theory is established. It is shown
 that the expansion constructed in the theory of perturbations is a part
 expansion and can be used as an approximation for calculating
 problems. In the case of the Schrodinger equation it is shown
 that if a bounded impulse is described by a certain expansion which,
 as the impulse tends to zero (point impulse), becomes the
 equation of classical dynamics. Orig. art. has 12 refs.

1-449110

1-449110

ENCL: 00

1-449110

1-449110

OTHER: 011

AKHREM, A.A.; KAMERNITSKIY, A.V.; DUBROVSKIY, V.A.; MOISEYENKOV, A.M.

Mechanism of cis-opening of α -ketoxides. Izv. AN SSSR. Ser. khim. no. 9:
1726-1727 S '64. (MIRA 17:10)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

AKHREM, A.A.; KAMERNITSKIY, A.V.; U BROVSKIY, V.A.; MOISEYENKOV, A.M.

One-stage synthesis of cis-diols from α -keto oxides. Izv. AN SSSR
Ser. khim. no.1:202-203 '65. (MIRA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

SELIVERSTOV, F.S., inzhener; DEPARMA, V.N., inzhener; ~~DUBROVSKIY, V.A.~~
redaktor; BALLOD, A.I., tekhnicheskiy redaktor; ~~PETROSHKO, Ye.I.~~,
tekhnicheskiy redaktor

[Road-building machinery] Dorozhno-stroitel'nye mashiny. Moskva,
Gos. izd-vo sel'skokhoz. lit-ry, 1954. 77 p. (MIRA 8:3)
(Road machinery)

STRELETZ, Vladimir Trofimovich; DUBROVSKIY, V.A., redaktor; PETRUSHKO,
Ye.I., tekhnicheskiy redaktor

[D-15 wind motor] Vetrodvigatel' D-15. Moskva, Gos. izd-vo selkhoz
lit-ry, 1955. 83 p. (MLA 8:6)
(Wind mills)

IZAKSON, Khanaan Il'ich; DUBROVSKIY, V.A., redaktor; PEVZNER, V.I., tekhnicheskii redaktor; BALLEU, A.I., tekhnicheskii redaktor

[Repair of a self-propelled combine] Remont samokhodnogo kombaina.
Izd. 3-e, perer. i dop. Moskva, Gosizd-vo selkhoz.lit-ry, 1955. 287 p.
(Combines (Agricultural machinery)) (MLBA 9:1)

VOLOD'KO, Ivan Fomich; DOBROVOL'SKIY, N.P.; KASHNEV, L.Ya.; PASHENKOV, Ya.M.
VOL'FOVSKAYA, V.N., redaktor; DUBROVSKIY, V.A., redaktor; SOKOLOVA,
N.N., tekhnicheskiy redaktor

[Construction of driven wells] Stroitel'stvo trubchatykh kolodtsev.
Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 175 p. (MLRA 9:8)
(Wells))

124-1957-1-161

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 17 (USSR)

AUTHORS: Bessonov, A. P., Dubrovskiy, V. A.

TITLE: On A. I. Taynov's Paper "Kinematics of the Assur Groups of the Second Class, Second Type" (O stat'e A. I. Taynova "Kinematika grupp Assura vtorogo klassa vtorogo tipa")

PERIODICAL: Izv. AN BSSR, 1955, Nr 2, pp 143-146

ABSTRACT: Instead of applying the well-known method of geometric loci to a kinematic investigation of the Assur groups of the fourth class, A. I. Taynov (RZhMekh, 1955, 47) attempted the development of a simpler and more direct method of investigation. The Authors have shown that A. I. Taynov's methods appears erroneous in principle and, therefore, that it cannot be used.

I. I. Artobolevskiy

1. Mathematics--Critic

Card 1/1

AKHMATOV, Boris Aleksandrovich; GORRACHEV, Ye.A.; IVANOV, I.S., inzhener;
DUBROVSKIY, V.A., redaktor; PRVZNER, V.I., tekhnicheskiy redaktor

[Self-propelled combines] Samokhodnyi kombain. Pod red. I.S.Ivanova.
Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 183 p. (MIRA 9:8)
(Combines (Agricultural machinery))

YERZHEV, A.V., inzhener; FERN, N.M., dotsent; DUBROVSKIY, V.A., redaktor;
RYBIN, I.V., tekhnicheskiy redaktor

[Principles of the mechanisation of agriculture; a textbook for
students in grades 8-10 of the secondary schools] Uchebnoe posobie
dlya uchashchikhsia VIII-X klassov srednei shkoly. Moskva, ^Uos.
uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956.
351 p. (MIRA 10:3)
(Agricultural machinery)

KOMAROV, Aleksey Nikolayevich; KOSTROVSKIY, Georgiy Ivanovich; DUBROVSKIY,
V.A., redaktor; BALLOD, A.I., tekhnicheskiy redaktor

[Repair of "Stalinets-80" tractor] Remont traktora "Stalinets-80."
Izd. 2-oe, perer. i dop. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956.
383 p. (MLBA 9:11)
(Tractors—Repairing)

MAKIYENKO, Nikolay Ivanovich; KROLIK, Z.M.; OSTAPENKO, N.N.; PESHKOV, Ye.O.;
RYABOV, N.F.; YUDIN, S.T.; DUBROVSKIY, V.A., redaktor; FEDOTOVA, A.F.,
tekhnicheskiiy redaktor

[Machine-shop practice and fundamental knowledge of materials]
Slesarnoe delo s osnovami materialovedeniya. Izd. 2-oe. Moskva, Gos.
izd-vo selkhoz. lit-ry, 1956. 414 p. (MIRA 9:10)
(Machine-shop practice)
(Agricultural machinery--Repairing)

DUBROVSKIY, Y.A., inzhener; KOPYLYAKOV, L.M., inzhener; MEL'NIK, S.A.,
inzhener, otvetstvennyy redaktor; PORTNOV, M.N., redaktor;
BALLOD, A.I., tekhnicheskiy redaktor

[Manual for leaders of tractor brigades] Spravochnik brigadir
traktornoi brigady. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956.
804 p. (MIRA 9:11)
(Agricultural machinery)

DUBROVSKIY, V.A.

LUZHKOVSKIY, Viktor Georgiyevich; ULITOVSKIY, Boris Alekseyevich; TSVETNIKOV,
Viktor Ivanovich; ~~DUBROVSKIY, V.A.~~, red.; SMIRNOV, G.I., tekhn.red.;
SHCHUPINA, T.A., tekhn.red.

[Practical work on trucks and tractors; a manual for normal schools]
Praktikum po avtotraktornomu delu; uchebnoe posobie dlia pedinstitutev.
Moskva, Gos. uchebno-pedagog. izd-vo M-vn prosv. RSFSR, 1957. 166 p.
(Tractors) (Motortrucks) (MIRA 11:2)

DUBROVSKIY, V.A.

LEVIN, Boris Yakovlevich; DUBROVSKIY, V.A., red.; GUREVICH, M.M., tekhn.
red.

[How to read blueprints] Kak chitat' chertezhi. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 183 p.
(Blueprints) (MIRA 11:7)

DUBROVSKIY, V. A.

KORBU, L.A., inzhener, otvetstvennyy red.; DUBROVSKIY, V.A., red.:
FEDOTOVA, A.F., tekhn.red.

[Mechanisation of agriculture in foreign countries] Mekhanizatsiia
sel'skogo khoziaistva za rubeshom. Moskva, Gos.isd-vo sel'khoz.lit-ry,
1957. 220 p. (MIRA 10:12)

(Farm mechanisation)

DUBROVSKIY, V.A.

YALNENY, Aleksey Vasil'yevich; DUBROVSKIY, V.A., red.; FEDOTOVA, A.F.,
tekhn.red.

[Brief manual on agricultural machinery] Kratkii spravochnik po
sel'khoz mashinam. Izd. 3-e, perer. Moskva, Gos. izd-vo sel'khoz.
lit-ry, 1957. 262 p. (MIRA 11:2)
(Agricultural machinery)

DUBROVSKIY, V.A., red.

[Leading machinery operators in agriculture] *Peredovye mekhanizatory
v sel'skom khoziaistve.* Moskva, Gos. izd-vo selkhoz. lit-ry, 1957.
350 p. (MIRA 11:4)

(Agricultural machinery)

DUBROVSKIY, V.A.

PROSHUNIN, Pavel Nikolayevich; DUBROVSKIY, V.A., red.; BALLOD, A.I.,
tekhn.red.

[RSM-8 tractor-drawn combine] Pritsepoi sernovoi kombain RSM-8.
Moskva, Gos.isd-vo sel'khoz.lit-ry, 1958. 174 p. (MIRA 11:7)
(Combines (Agricultural machinery))

BOGATYKH, Ya.D.; GALAKTIONOV, A.A.; DEKAN, V.A.; YEVSTYUGOV, A.I.;
KOZLOVSKIY, A.S.; MARTYNOV, P.T.; DUBROVSKIY, V.A., red.; PEDOTOVA,
A.F., tekhn. red.

[Collective farm builder] Stroitel' v kolkhoze. Moskva, Gos. izd-vo
sel'khoz. lit-ry, 1958. 502 p. (MIRA 11:12)
(Building)

ISAKSON, Khasean Il'ich, inzh., glavnyy konstruktor; DUBROVSKIY, V.A.,
red.; SMELYANSKIY, V.A., red.; BALIOD, A.I., tekhn.red.; PEDOTOVA,
A.F., tekhn.red.

[Self-propelled SK-3 combine] Samokhodnyy kombin SK-3. Moskva,
Gosizd-vo sel'khoz.lit-ry, 1959. 215 p. (MIRA 12:9)

1. Gosudarstvennoye spetsial'noye konstruktorskoye byuro po
samokhodnym kombaynam (GSKB) pri Taganrogskom zavode (for Isakson).
(Combines (Agricultural machinery))

NIKANDROV, Boris Ivanovich; ~~DUBROVSKIY, V.A.~~ red.; SOKOLOVA, N.N.,
tekhn.red.; PRYZNER, V.I., tekhn.red.

[Livestock buildings] Zhivotnovodcheskie postroiki. Moskva,
Gos.isd-vo sel'khoz.lit-ry, 1959. 270 p. (MIRA 12:9)
(Farm buildings)

SEKPAVITSKIY, Yekov Moiseyevich; FUDIMAN, Grigoriy Moiseyevich;
DUBROVSKIY, V.A., red.; SILIN, V.S., red.; BALLOD, A.I.,
tekhn.red.

[Tolerances in tractors and motor vehicles; pocket handbook]
Zasory v traktorakh i avtomobilakh; karmennyyi spavochnik.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 365 p.

(MIRA 14:2)

(Tractors--Maintenance and repair)
(Motor vehicles--Maintenance and repair)

DVOROVENKO, G.P.; CHERNOVOLOT, K.D.; DUBROVSKIY, V.A., red.; GUREVICH,
M.M., tekhn. red.

[Collected problems in the theory of tractors and motortrucks]
Zadachnik po teorii traktora i avtomobilia. Moskva, Gos.izd-vo
sel'khoz. lit-ry, zhurnalov i plakatov, 1961. 111 p.

(MIRA 14:11)

(Tractors)

(Motortrucks)

DUBROVSKIY, Vladimir Aleksandrovich; SHALYT, N.A., red.;
NESNYSLOVA, L.M., tekhn. red.

[Fundamentals of the study of materials and repair work]
Osnovy materialovedeniia i remontnogo dela. Izd.2., ispr.
i dop. Moskva, Proftekhizdat, 1963. 238 p.

(Materials)

(MIRA 17:1)

(Agricultural machinery—Maintenance and repair)

DUBROVSKIY, V.A.; SKURIDIN, G.A.

Propagation of weak perturbations in magnetohydrodynamics. Geomag.
1 ser. 5 no.2:234-250 Apr '65. (MIRA 18:7)

DUBROVSKIY, V.A.; IMITRIYEV, I.N., red.

[Fitting work in repairing agricultural equipment]
Slesarnye raboty pri remonte sel'skokhoziaistvennoi
tekhniki. Moskva, Kolos, 1965. 141 p. (MIRA 18:7)

DUBROVSKIY, V.A., insh.

Propelling efficiency of catamarans. Sudostroenie 30 no.7:8-9
Jl '64. (MIRA 18:9)

DUBROVSKIY, V.A., inzh.; IVANOV, V.M., inzh.; SHEPKOV, V.S., kand. tekhn. nauk

Studying the seaworthiness and strength of catamarans. Sudostroenie
30 no.7:63-65 J1 '64. (MIRA 18:9)

C. A. DUBROVSKIY, V. A.

Aggregation characteristics of aqueous crocus suspensions. V. A. Dubrovskiy, *Soviet J. Chem. Phys.*, No. 4, 9-13 (1957). Autoaggregation of eq. crocus suspensions was observed for grains with an equiv. diam. less than 10μ , and the capacity to aggregate increased with concn. of grains in the suspension. Grains larger than 10μ did not form aggregates. Distribution curves of crocus particles indicate that the process of complete aggregation proceeds with time and consists of rapid and slow stages of autoaggregation. Dispersion of the suspension was increased by boiling; complete aggregation of all fine particles occurred only a considerable time after boiling. Action of KCl acid increased the size of aggregates somewhat and caused only an insignificant decrease in time of settling; FeCl₃ solution hindered aggregation. Aggregates were destroyed by shaking but re-formed some time after the shaking. Time required for the re-aggregation decreased with concn. of KCl and increase in concn. of crocus in suspension and increased with concn. of KOH and H₂SO₄; in strongly alk. and acid media, the time began to decrease again. Action of FeCl₃ accelerated polishing of glass while KCl hindered the process; FeCl₃ increases reaction surface of crocus in suspension while KCl reduces it. Aggregates formed by autoaggregation of the crocus do not play a significant role in polishing because they are destroyed by shaking. If the system does not have electrolytes, then the particles which form aggregates, not the aggregates themselves, participate chiefly in the process of polishing. B. Z. Kamich

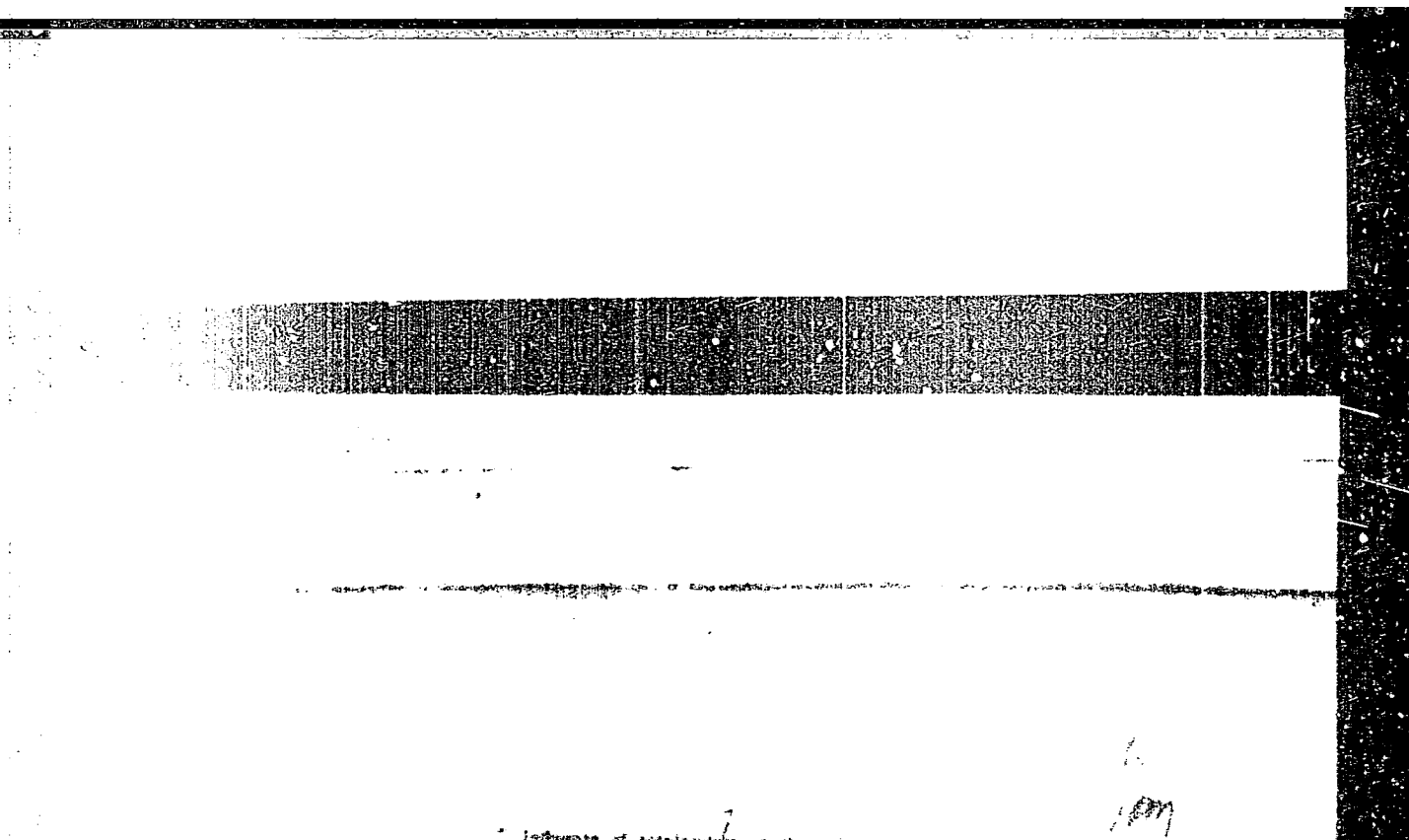
"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

Use of this material for transferring the plant material
Persons: A. C. Alexander, I. A. [unclear] and [unclear]
[unclear] and V. A. [unclear]
1958, Gen. C. A. 43, 4501



MINAKOV, A.G.; SHCHEPAISKIY, L.A.; ANDREGA, P.M.; DUBROVSKIY, V.A.

Answer to the K.Gesse's article. Stek.i ker. 12 no.12:23-25 D '55.
(MLRA 9:3)

(Glass manufacture) (Zinc sulfate)

DUBROVSKIY, V. A.

USSR/Chemical Technology. Chemical Products and Their Application -- Other industries, I-30

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6842

Author: Dubrovskiy, V. A.

Institution: None

Title: Determination of Thickness of Silver Coating of Mirrors by Means of Beta-Radiation

Original

Publication: Steklo i keramika, 1956, No 4, 14-17

Abstract: Thickness of Ag-coating of glass mirrors was controlled by the method of beta-radiation scattering, using the apparatus designed by Senina (Novyye metody izmereniya tolshchin. Sb. st. AN SSSR, 1946; Problemy sovremennoy fiziki, 1952, No X). As a source of beta-radiation was used Tl^{204} of maximum energy of beta-particles of 0.770 Mev. Coatings having a thickness from 0.01 to several μ were measured. The optimal distance (18 mm) was determined between the apparatus and a glass of 11.9 mm in thickness, at which variations in the thickness

Card 1/2

UKRAINSKIY SIIAL inst. STEKLA

USSR/Chemical Technology. Chemical Products and Their Application -- Other industries, I-30

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6842

Abstract: of glass, up to 2.0 mm, do not disrupt the compensation of the apparatus. Deviations between the results obtained and data of chemical analyses, did not exceed, essentially, 10%.

Card 2/2

[illegible]

3
12-26-51
COP
JRM

A study of the surface flow of glass in the test furnace with the use of isotopic tracers. (See also: *Journal of Research of the National Bureau of Standards*, Vol. 57, 2, 8-15 (1953), and *Journal of Research of the National Bureau of Standards*, Vol. 57, 2, 8-15 (1953), No. 1. With the use of isotopic tracers, the flow of glass through the furnace to the collector was followed. The samples taken at regular intervals along the flow were measured for their isotopic composition. The results show that the flow of glass is sufficiently high to keep the isotopic composition at a constant level. For large tank furnaces, the more capacity the use of isotopic tracers is recommended. The presence of refractory glass in the furnace taken at the collecting area (40 cm) was found to be of the isotopic composition of the furnace, i.e., the glass was remaining a distance of 40 cm from the furnace. The isotopic composition of the glass was 0.14% and at the same time the isotopic composition of the glass was 0.14% at 40 cm, while the isotopic composition of the glass was 0.14% at 40 cm.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411420004-5"

DUBROVSKIY, Y.A.

Conference on silicates in Berlin. Stek. i ker. 14 no.3:30-32 Nr '57.
(Germany, East--Glass Manufacture) (Silicates) (MLRA 10:4)

[illegible]